

# Development of Virginia's Highway Safety Corridor Program

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Highway Safety Corridor Program



# Background

- Code of Virginia (2003) required VDOT to establish a Highway Safety Corridor (HSC) program in consultation with DMV and the State Police.
- Program objective: reduce crashes through engineering, enforcement, and education on Interstates and Primary roadway systems

# Penalties

- **Fines for moving violations are doubled** in designated corridors, subject to:
  - \$500 maximum for traffic infractions
  - \$200 minimum for criminal infractions

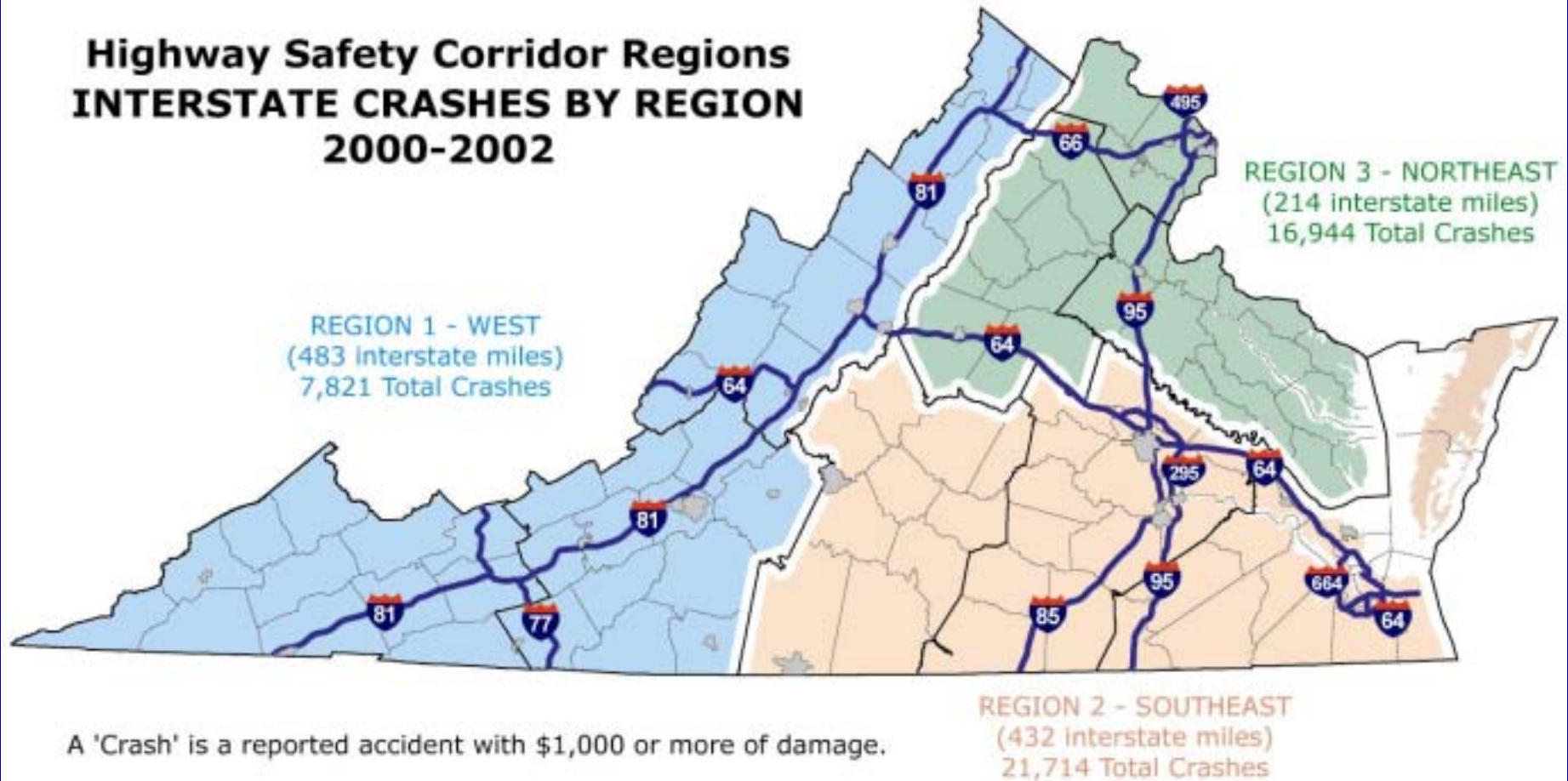
# Legislative Requirements

- Designation of highway segment based on engineering studies of:
  - Type and volume of traffic
  - Crashes
- Public hearings prior to adopting criteria and designating each corridor
- Report data on effectiveness annually

# Safety Corridor Identification

- Preliminary screening
  - Identify high crash frequency & rate sites
- Detailed analysis of corridors
  - Causal factors
  - Potential corridor effectiveness
- Corridor selection with VA State Police

## Highway Safety Corridor Regions INTERSTATE CRASHES BY REGION 2000-2002



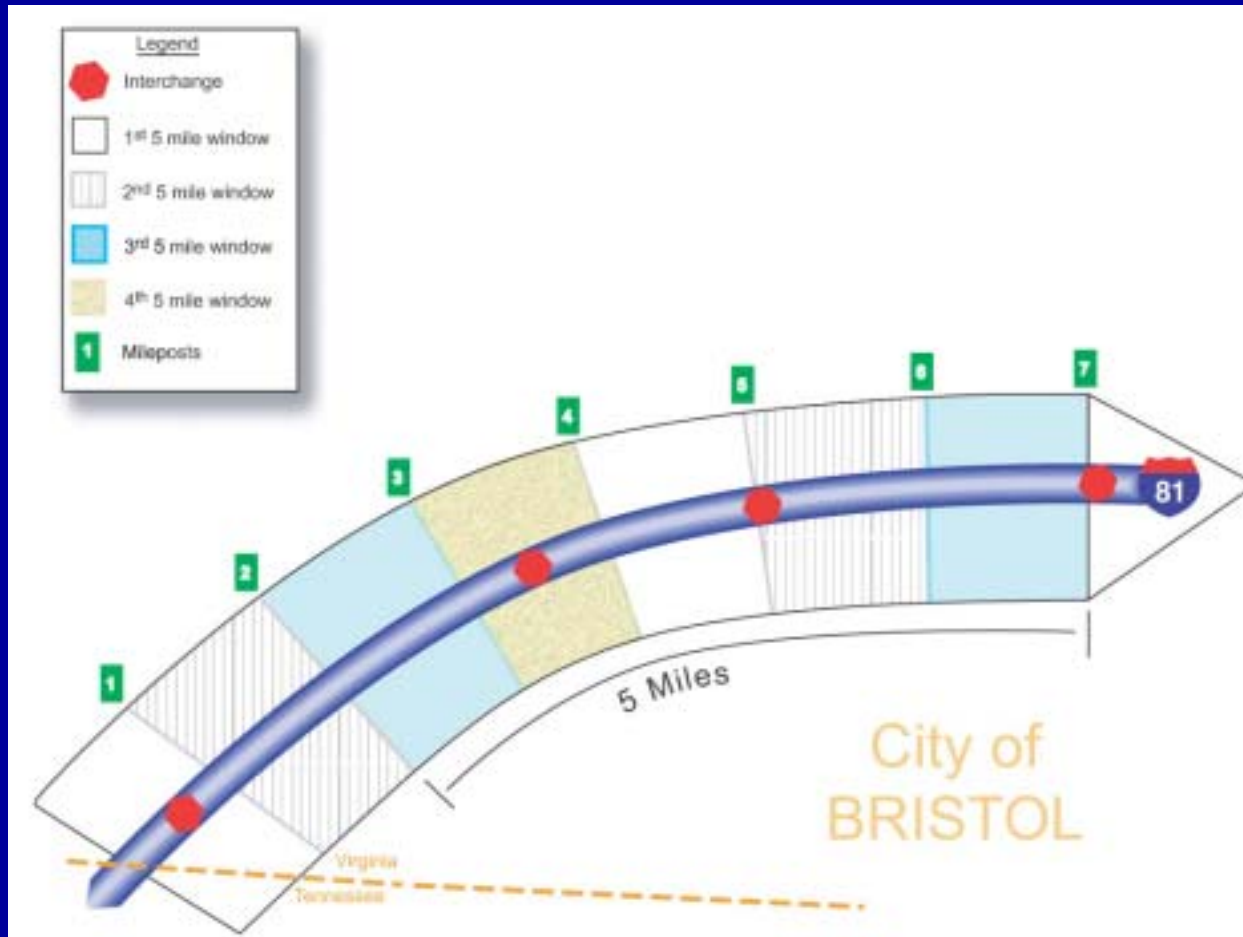
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# Screening Criteria

- Crashes per mile (weighted by severity) must exceed 150% of regional average
- Overall crash rate must exceed 125% of regional average
- Truck-involved crash rate must exceed regional average



# Sliding Window Data Summaries

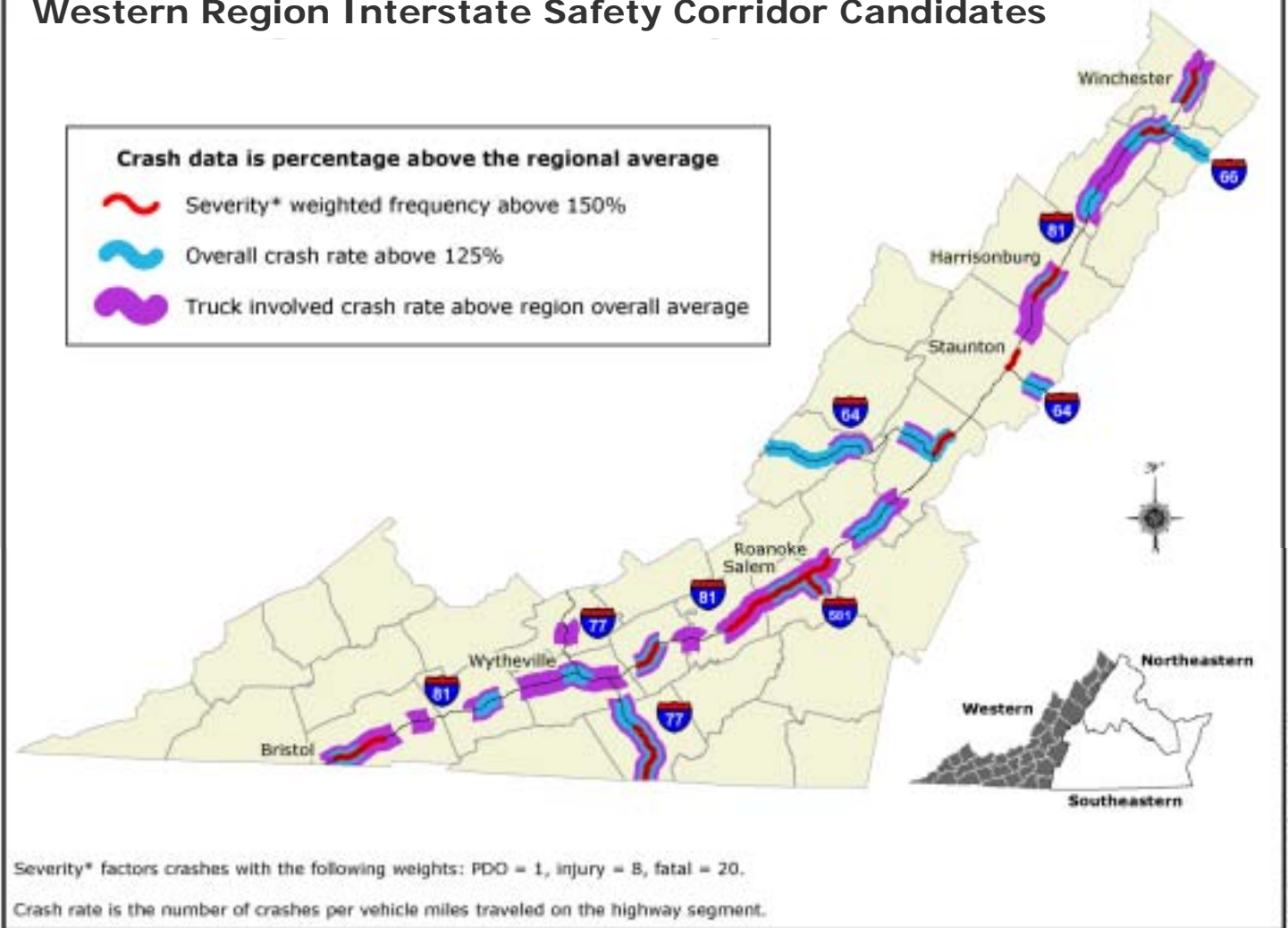


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## Western Region Interstate Safety Corridor Candidates



### Highway Safety Corridor Program

# Final Selection

- Major factors in crashes
  - Driver speeding
  - DUI
- Types of crashes
- Crash severity
- Signing
- Enforcement

# I-81 MP 127 to MP 142

## Major Factors in Crashes

<u>Major Factor</u>	<u>Percentage of Crashes</u>
Driver Inattention	58.4%
Road Slick	13.9%
Driver Handicap	7.5%
Driver Speeding	6.9%
Vehicle Defective	6.1%
Weather/Visibility Conditions	4.3%
Driver Under the Influence of Alcohol or Drugs	2.9%

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# Engineering

- Post Signs for Corridor
- Roadway Safety Assessment
- Monitor Speeds, Volumes and Crashes

# Corridor Signing Start to Finish

**BEGIN**

**HIGHWAY SAFETY CORRIDOR**

**FINES FOR MOVING VIOLATIONS**

**\$200 MINIMUM – CRIMINAL OFFENSES**

**\$500 MAXIMUM – TRAFFIC INFRACTIONS**

Reflectorized

Regulatory

(15 ft. x 6 ft.)

(12 ft. x 4 ft.)

**END HIGHWAY  
SAFETY CORRIDOR**

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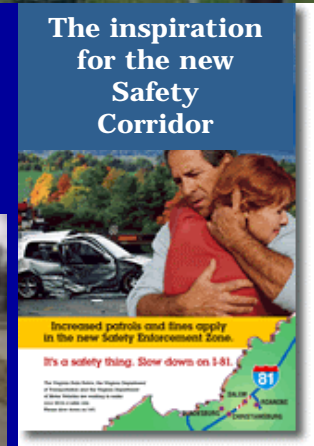
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# Law Enforcement

- VSP began “stepped-up” I-81 HSC
- Initiated area motorcycle patrol
- No additional staff or overtime funding provided

# Education

- VDOT Public Affairs w/ VSP & DMV input
- Focus Groups and Public Hearings on Criteria and Corridor Designation
- Radio PSAs, Posters, Direct Mail/Brochure, College Ads  
[www.virginiadot.org/bulletin/2004JanFeb/default.asp](http://www.virginiadot.org/bulletin/2004JanFeb/default.asp)
- Website on policy, process and procedures



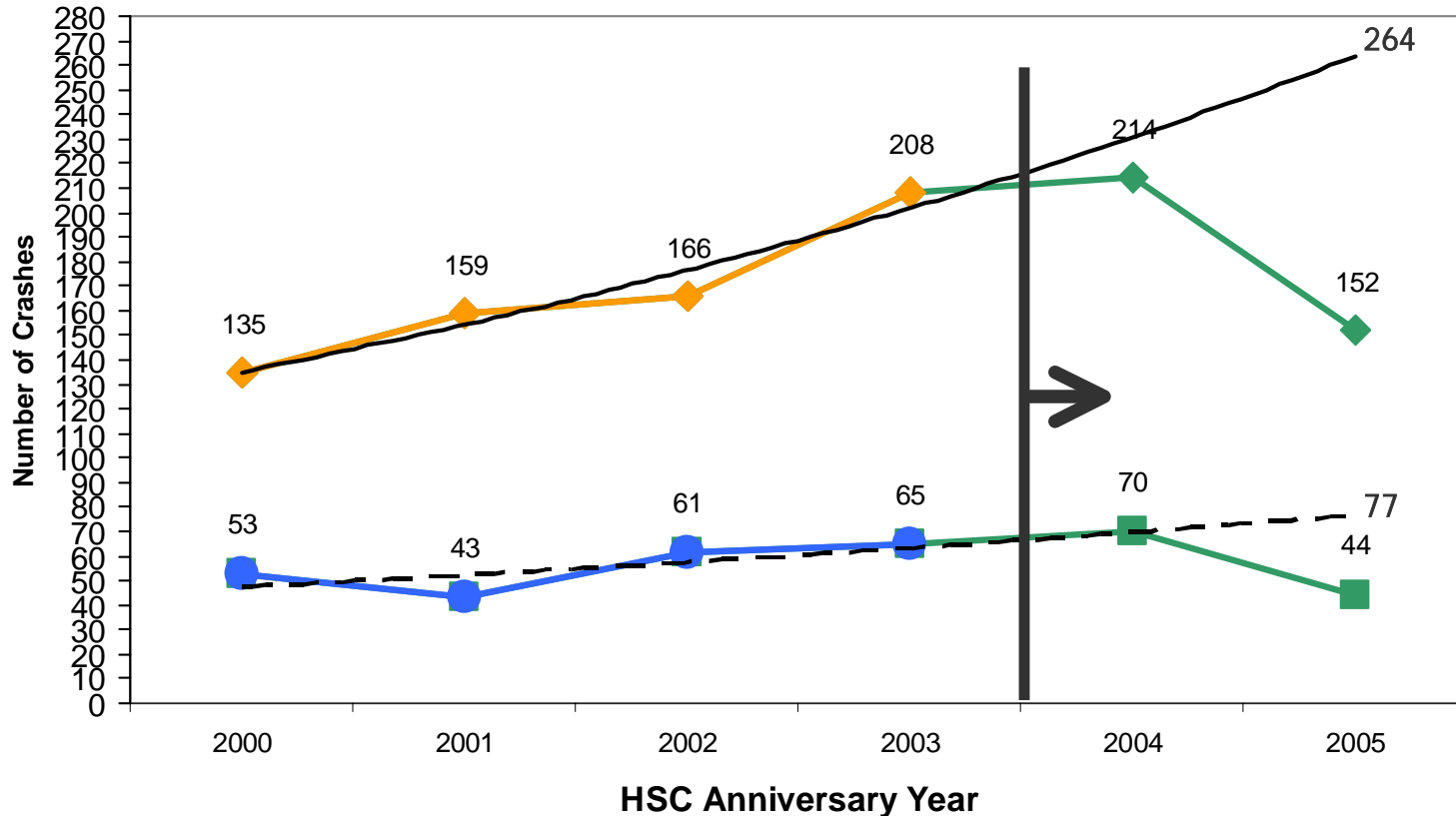
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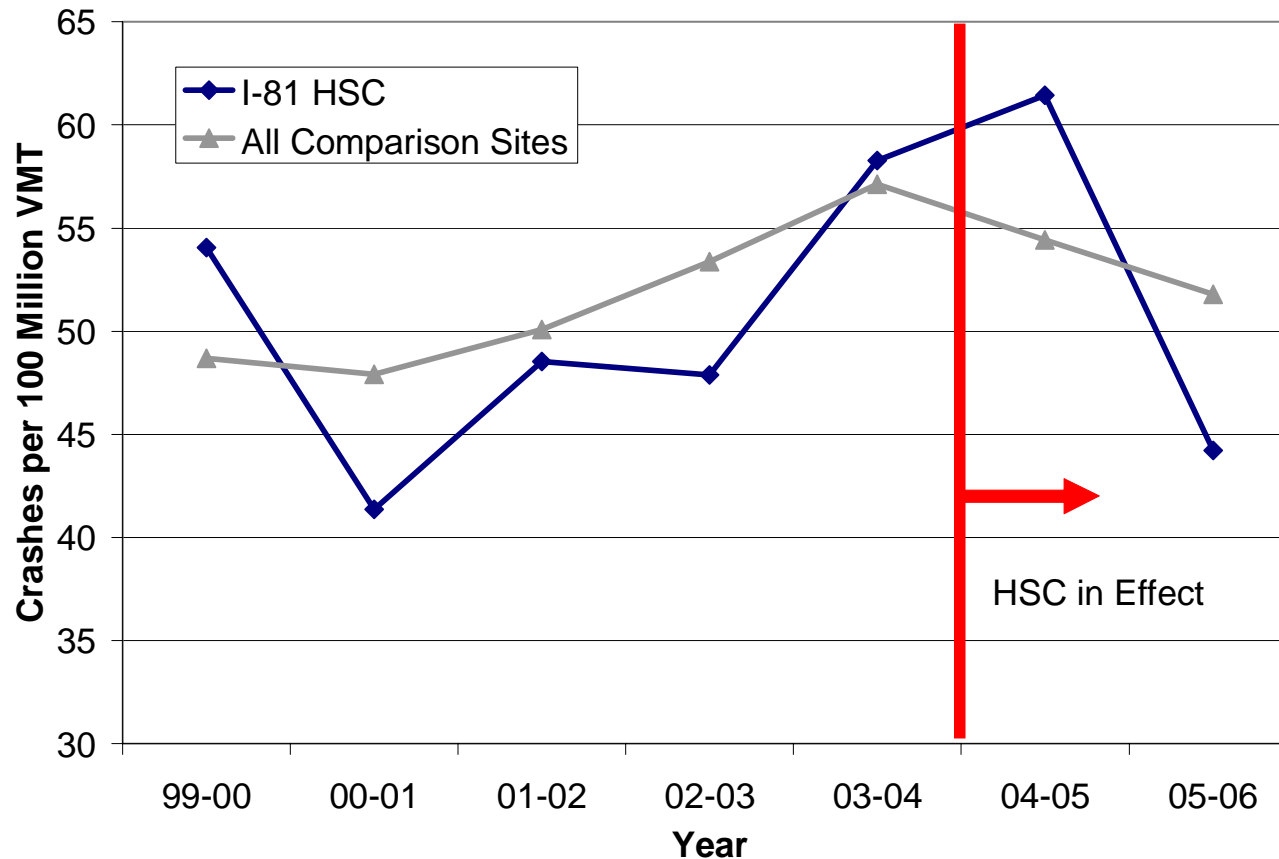
# Safety Evaluation = Good News

## I-81 Highway Safety Corridor Crash Trends



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# Rate Comparison = OK News



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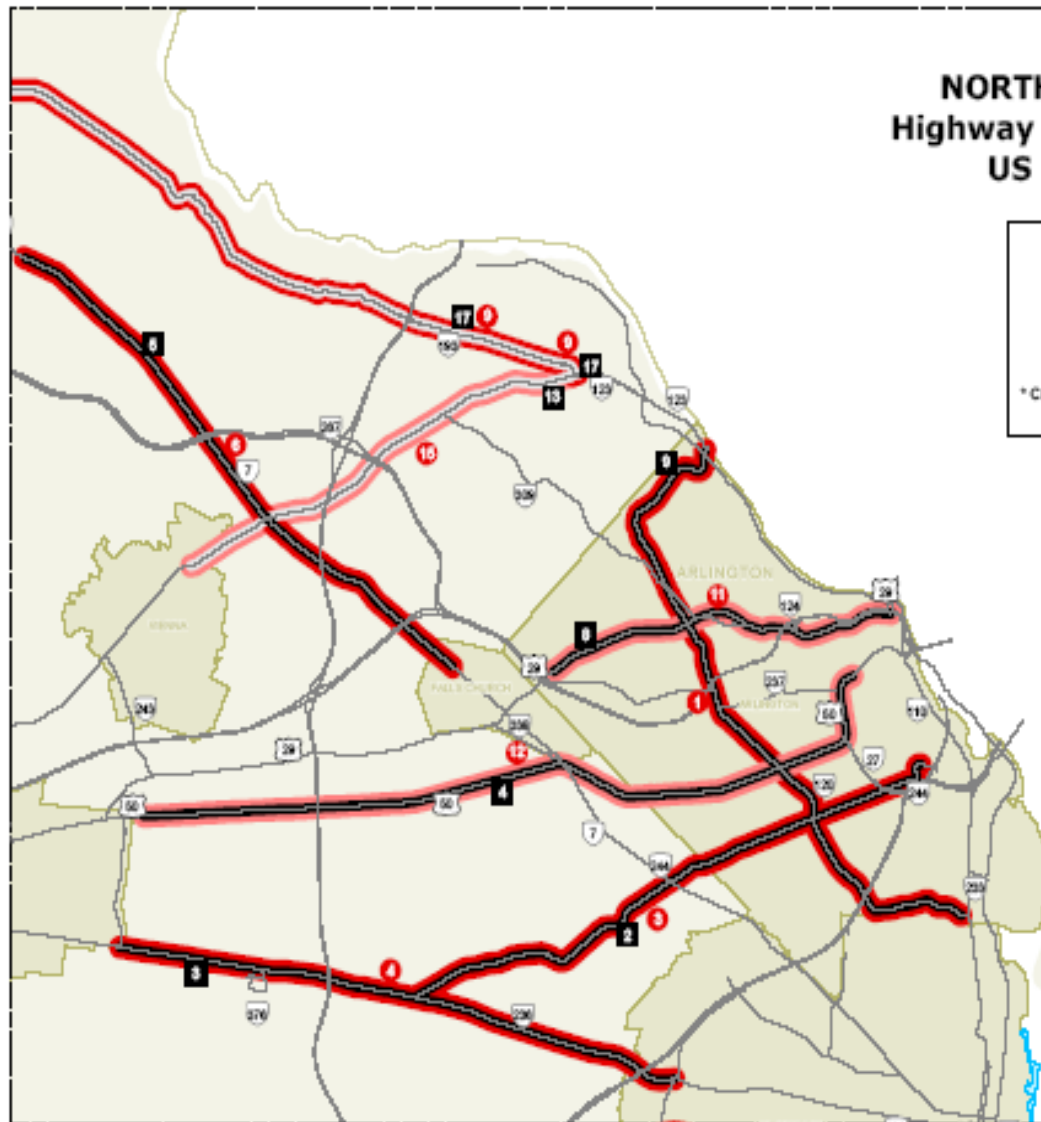
# Remaining Issues

- Timely and accurate crash data
- Evaluation of corridor effectiveness over longer period
- Funding for enforcement and engineering
- Review of *Primary* roadway system data for criteria, program policy and procedures

# Primary System Corridors

- Smaller comparison areas
- Needs detailed roadway inventory
- Fewer candidates=higher thresholds
- Local government process and implementation
- Develop enforcement, education and reporting requirements

# **NORTHERN VIRGINIA DISTRICT (inset)** **Highway Safety Corridor Candidate Segments** **US Highway & VA Primary System**



Crash Rate Rank\*

**1** Top 10

**11** 11 +

Density Rate Rank\*\*

**1** Top 10

**11** 11 +

\* Crash Rate per 100M VMT above district average with 99% confidence.  
 \*\* Density Rate based on fatal & injury crashes per mile.

0 0.5 1 1.5 2 Miles

VDOT TMFD 3/22/06 - #118-8 NOVA INSET

# Primary System HSC Designation

- Start with few “high impact” corridors
- Work with Locality for Board approval and public hearing
- Define signing needs and design
- Conduct Roadway Safety Assessment
- Fund Improvements with Maintenance and SAFETEA-LU HSIP

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